

## **AMENDMENTS TO THE CLAIMS**

In accordance with the PTO's amendment format, a detailed listing of all claims has been provided. A status identifier is provided for each claim in parentheses following each claim number. Changes to the claims are shown by strikethrough or double bracketing (for deleted text) or underlining (for added text).

### **In the Claims:**

Claims 1-33 were previously pending.

Claims 1-22 are allowed.

Please amend claims 23, 26-28, 30-33 as shown below.

No claims are canceled.

No new claims are added.

Claims 1-33 are pending.

1 **Claims:**

2 1. (Previously presented) A method comprising:  
3 selectively aligning at least two image based rendering (IBR) image  
4 data along a specific direction; and  
5 selectively rebinning the aligned IBR image data to form a multi-  
6 perspective panorama by determining at least one displacement vector  
7 associated with the at least two IBR image data and subdividing at least one  
8 of the IBR image data based on the displacement vector and combining  
9 specific portions selected from each IBR image data to form at least a  
10 portion of the multi-perspective panorama.

11  
12 2. (original) The method as recited in Claim 1, wherein the  
13 IBR image data includes concentric mosaic (COM) image data.

14  
15 3. (original) The method as recited in Claim 2, wherein the  
16 specific direction is substantially a horizontal direction with respect to a  
17 captured scene.

18  
19 4. (original) The method as recited in Claim 1, wherein  
20 selectively aligning the at least two image based rendering (IBR) image data  
21 further includes pair-wise aligning of concentric mosaic (COM) image data.  
22  
23  
24  
25

1           5.     (Previously presented)           The method as recited in  
2 Claim 1, wherein selectively rebinning the aligned IBR image data to form  
3 the multi-perspective panorama further includes:

4               subdividing each of the IBR image data into a plurality of portions.

5  
6           6.     (Previously presented)           The method as recited in Claim 5,  
7 wherein subdividing each of the IBR image data into the plurality of  
8 portions further includes subdividing the IBR image data based on a  
9 magnitude of the displacement vector.

10  
11          7.     (original)     The method as recited in Claim 6, wherein the  
12 displacement vector is a motion vector.

13  
14          8.     (original)     The method as recited in Claim 6, wherein  
15 determining at least one displacement vector further includes setting the  
16 displacement vector for each of the at least two IBR image data to be of  
17 equal magnitude so as to support a simple rebinning process.

18  
19          9.     (original)     The method as recited in Claim 6, wherein  
20 determining at least one displacement vector further includes setting the  
21 displacement vector for each of the at least two IBR image data to be of  
22 different magnitude while supporting a smart rebinning process.

23  
24          10.    (original)     The method as recited in Claim 1, further  
25 comprising:

1       generating a set of multi-perspective panoramas to provide a dense  
2 representation of an IBR captured environment.

3  
4       11. (original)     The method as recited in Claim 10, further  
5 comprising:

6       encoding at least a portion of the multi-perspective panoramas using  
7 a 3D wavelet transform.

8  
9       12. (Previously presented)       A       computer-readable  
10 medium having instructions for performing the steps of:

11       selectively aligning at least two image based rendering (IBR) image  
12 data along a specific direction; and

13       selectively rebinning the aligned IBR image data to form a multi-  
14 perspective panorama by determining at least one displacement vector  
15 associated with the at least two IBR image data and subdividing at least one  
16 of the IBR image data based on the displacement vector and combining  
17 specific portions selected from each IBR image data to form at least a  
18 portion of the multi-perspective panorama.

19  
20       13. (original)     The computer-readable medium as recited in  
21 Claim 12, wherein the IBR image data includes concentric mosaic (COM)  
22 image data.

1           14.   (original)   The computer-readable medium as recited in  
2   Claim 13, wherein the specific direction is substantially a horizontal  
3   direction with respect to a captured scene.  
4

5           15.   (original)   The computer-readable medium as recited in  
6   Claim 12, wherein selectively aligning the at least two image based  
7   rendering (IBR) image data further includes pair-wise aligning of  
8   concentric mosaic (COM) image data.  
9

10          16.   (Previously presented)           The    computer-readable  
11   medium as recited in Claim 12, wherein selectively rebinning the aligned  
12   IBR image data to form the multi-perspective panorama further includes:  
13        subdividing each of the IBR image data into a plurality of portions.  
14

15          17.   (Previously presented)           The    computer-readable  
16   medium as recited in Claim 16, wherein subdividing each of the IBR image  
17   data into the plurality of portions further includes subdividing the IBR  
18   image data based on a magnitude of the displacement vector.  
19

20          18.   (original)   The computer-readable medium as recited in  
21   Claim 17, wherein the displacement vector is a motion vector.  
22

23          19.   (original)   The computer-readable medium as recited in  
24   Claim 17, wherein determining at least one displacement vector further  
25   includes setting the displacement vector for each of the at least two IBR

1 image data to be of equal magnitude so as to support a simple rebinning  
2 process.

3  
4 20. (original) The computer-readable medium as recited in  
5 Claim 17, wherein determining at least one displacement vector further  
6 includes setting the displacement vector for each of the at least two IBR  
7 image data to be of different magnitude while supporting a smart rebinning  
8 process.

9  
10 21. (original) The computer-readable medium as recited in  
11 Claim 12, further comprising instructions for:

12 generating a set of multi-perspective panoramas to provide a dense  
13 representation of an IBR captured environment.

14  
15 22. (original) The computer-readable medium as recited in  
16 Claim 21, further comprising instructions for:

17 encoding at least a portion of the multi-perspective panoramas using  
18 a 3D wavelet transform.

19  
20 23. (Currently amended) An apparatus comprising:  
21 ~~at least one processing unit configured to~~  
22 a first logic module to selectively align at least two image based  
23 rendering (IBR) image data along a specific direction, ~~and ; and~~ and

24 a second logic module to selectively rebin the aligned IBR image  
25 data to form a multi-perspective panorama by determining at least one

1 displacement vector associated with the at least two IBR image data and  
2 subdividing at least one of the IBR image data based on the displacement  
3 vector and combining specific portions selected from each IBR image data  
4 to form at least a portion of the multi-perspective panorama.

5  
6 24. (original) The apparatus as recited in Claim 23, wherein  
7 the IBR image data includes concentric mosaic (COM) image data.

8  
9 25. (original) The apparatus as recited in Claim 24, wherein  
10 the specific direction is substantially a horizontal direction with respect to a  
11 captured scene.

12  
13 26. (Currently amended) The apparatus as recited in Claim  
14 23, wherein the ~~processing unit~~ first logic module is further configured to  
15 pair-wise align [[of]] concentric mosaic (COM) image data.

16  
17 27. (Currently amended) The apparatus as recited in Claim  
18 23, wherein the ~~processing unit~~ second logic module is further configured  
19 to subdivide each of the IBR image data into a plurality of portions.

20  
21 28. (Currently amended) The apparatus as recited in Claim  
22 27, wherein the ~~processing unit~~ second logic module is further configured  
23 to subdivide the IBR image data based on a magnitude of the displacement  
24 vector.

1           29.   (original)    The apparatus as recited in Claim 28, wherein  
2 the displacement vector is a motion vector.

3  
4           30.   (Currently amended)    The apparatus as recited in Claim  
5 28, wherein the ~~processing unit~~ second logic module is ~~further configured~~  
6 ~~to set~~ the displacement vector for each of the at least two IBR image data  
7 to be of equal magnitude so as to support a simple rebinning process.

8  
9           31.   (Currently amended)    The apparatus as recited in Claim  
10 28, wherein the ~~processing unit~~ second logic module is ~~further configured~~  
11 ~~to set~~ the displacement vector for each of the at least two IBR image data  
12 to be of different magnitude while supporting a smart rebinning process.

13  
14           32.   (Currently amended)    The apparatus as recited in Claim  
15 23, wherein the ~~processing unit~~ second logic module is further configured  
16 to generate a set of multi-perspective panoramas to provide a dense  
17 representation of an IBR captured environment.

18  
19           33.   (Currently amended)    The apparatus as recited in Claim  
20 32, wherein the ~~processing unit~~ second logic module is further configured  
21 to encode at least a portion of the multi-perspective panoramas using a 3D  
22 wavelet transform.